

**AIRWAY FACILITIES NAS TECHNICAL EVALUATION PROGRAM**



**September 14, 1995**

**DEPARTMENT OF TRANSPORTATION  
FEDERAL AVIATION ADMINISTRATION**

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## RECORD OF CHANGES

**DIRECTIVE NO.**


6040.6E

[illegible]

## FOREWORD

This order institutes an Airway Facilities National Air Space (NAS) Technical Evaluation Program (NASTEP) that is designed to be more responsive to the present and future needs of the NAS and will permit better use of increasingly limited agency resources. Key objectives of the program include new ways of conducting the technical Quality Assurance Program, increased user input, lower cost, and the production of objective information suitable for all levels of management decision-making. The program's success and benefits are very much dependent on the initiative, creativity, and resourcefulness of the individual evaluator and evaluation teams.

This order defines the objectives of the technical evaluation program, outlines the responsibilities of the various organizational levels, and defines the NASTEP philosophy and procedure. A separate document, NASTEP Implementation Guidelines (initial publication 10/01/95, Version 1.0) provides detailed information on conducting and documenting technical evaluations, analyzing and using evaluation findings at the regional and national level, training of evaluators, and the use of NASTEP software. The guidelines are established, maintained, and published separately by the Life Cycle Policy and Requirements Division, ALM-200.

  
Joaquin Archilla  
Director of Airway Facilities

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## AIRWAY FACILITIES NAS TECHNICAL EVALUATION PROGRAM

1. **PURPOSE**. This order defines the Airway Facilities National Airspace System (NAS) Technical Evaluation Program (NASTEP). The program provides decision- making information based on an independent review of four major areas:

- a. How well facilities and services meet their intended objectives,
- b. How well the maintenance program is executed,
- c. How well assets are managed, and
- d. How well customer needs are being met.

2. **DISTRIBUTION**. This order is distributed to the branch level within Airway Facilities, Office of System Architecture and Program Evaluation, Office of Communications, Navigation, and Surveillance Systems in Washington; to the section levels in the regional Airway Facilities divisions, the FAA Academy, and FAA Logistics Center; to the division level at the FAA Technical Center; and to all Airway Facilities field offices with a standard distribution.

3. **CANCELLATION**. Order 6040.6D, Airway Facilities Technical Inspection Program, dated August 8, 1991, is canceled.

4. **EXPLANATION OF CHANGES**. The Technical Evaluation program has been changed significantly from an equipment and subsystem parameter inspection program to a system and service evaluation program. The focus of the program has been moved from detailed parameter checks to an "Is the system providing the advertised service?" evaluation. It also reflects the following changes:

- a. Reduces the mandatory site visits to 50 percent of the facilities and services addressed ;
- b. Introduces a flexible approach to technical evaluation; with separate guidelines document provided by ALM.
- c. Implements a revised semi-annual and annual reporting ;
- d. Introduces new software to reflect life-cycle supportability elements;
- e. Requires customer input and feedback.
- f. Provides a process flow-chart diagram.

8. PROGRAM OBJECTIVES. The objectives of the AF technical evaluation program are to:

- a. Provide an independent review of the services provided by the NAS and how well they match customer needs, as well as the effectiveness of the AF maintenance program.
- b. Identify, define, and report deviations from standards, technical problems, and other deficiencies.
- c. Identify instances of exceptionally well-maintained facilities.
- d. Monitor technical evaluation program status, progress, and responsiveness.
- e. Inform involved parties of program status through summary feedback reporting.
- f. Ensure compliance with the JRPG policies for JSS facilities.
- g. Manage evaluation resources in an efficient, cost effective manner.
- h. Identify, define, and report anticipated critical problems.
- i. Improve the technical abilities of the technicians and improve the operation of the systems.

9. PROGRAM OVERVIEW.

a. The NASTEP defined by this order and an associated ALM-200 guideline document, (NASTEP Implementation Guidelines -- initial publication 10/01/95, Version 1.0) accomplishes AF's technical oversight responsibilities by evaluating 100 per cent of the facilities within its scope on their performance and service to the user(s). The program shifts the past focus from inspection to evaluation, from individual facilities to a larger environment, and from inspections by individuals to a collaborative activity with the Systems Maintenance Offices (SMO). Appendix 1 shows how program activities occur chronologically. For each group of facilities in the scheduling cycle, a two-step process is used:

(1) The first step, completed on 100 per cent of the facilities within the scope of this order, is to solicit and analyze data on groups of facilities and services and input from all interested parties, including non-FAA users of the NAS. Much of this data-gathering and analysis can be accomplished remotely (without travel). Based primarily on the results of this effort, a prioritized list of facilities which will receive site visits is prepared. See paragraph 12. and the NASTEP Implementation Guidelines for details.

. (3) Analyze, compile, and publish national issue and program status reports as described in paragraph 14.a.

(4) Provide and maintain evaluator training and program software as defined in paragraphs 15 and 16.

(5) Identify and negotiate acceptance by appropriate office(s) of primary interest (OPI) for evaluation issues determined to have national impact.

(6) Provide funding for program meetings.

b. The regional AF Divisions shall:

(1) Establish a centralized technical evaluation program to plan, schedule, coordinate, and conduct technical inspections and evaluations as required by qualified personnel.

(2) Provide funding and resources for program accomplishment.

(3) Review and approve program reports and assign action to the appropriate office.

c. Each regional NASTEP Branch, shall:

(1) Designate a program manager as a single point of contact for the region.

(2) Coordinate inter-regional assistance for evaluations where local or regional expertise is not available.

(3) Determine the need for special inspections. For joint-use facilities, the appropriate military agency may assist in the determination process.

(4) Accomplish the reporting activities described in paragraph 14.

(5) Coordinate with military representatives for participation in inspections of joint-use facilities and equipment. The military should have equal inspection rights (the military and FAA representatives are equal partners) for that portion of a facility inspection where military-owned, FAA-maintained equipment is inspected.

(6) Identify the appropriate action office for evaluation issues assigned to the branch, and negotiate acceptance.

c. Facility and/or system technical investigations are in-depth inspection efforts, directed at any or all characteristics of a particular facility or group, and are usually corrective in nature. During group evaluations, the need for (usually subsequent) investigations is determined from analysis of services, interviews with users and technicians, flight inspection or National Airspace Performance Reporting System (NAPRS) data, etc.

## 12. SCHEDULING OF TECHNICAL EVALUATIONS, INSPECTIONS, AND INVESTIGATIONS.

a. Group evaluations, including any associated facility on-site visits, shall be scheduled using the following process:

(1) On a regional basis for a 4 year cycle, all facilities and services within the scope of this order except for JSS facilities are assigned to a particular group (see subparagraph 10.a.(2) below). In the first year, facilities/services are assigned freely without regard to previous inspection cycles under Order 6040.6D. Typically, the choice of group types and the specific population of facilities/services within a group will not change significantly from cycle to cycle. Any number of groups can be defined. The facilities/services within a group can be chosen by one, some, or all of the following methods, based on regional preference, geographical constraints, costs, and other criteria:

(a) By technical discipline or specialty; e.g., environmental facilities, Instrument Landing Systems, ASR-9's, etc.

(b) By airports, including both on- and off-airport facilities logically related to the airport.

(c) By airspace coverage; e.g., facilities supporting an ARTCC.

(d) By operational use, such as an instrument approach, Standard Instrument Departure (SID), or Standard Terminal Arrival Route (STAR).

(e) By service.

(f) By SMO.

(g) By SSC; i.e., part of a SMO.

(h) By cost center code.

(i) By any other logical or convenient method; e.g., all or any part of a region's facilities, RCAG's and their controlling ARTCC's.



# 15. TYPES, ASSIGNMENT, AND CLEARANCE/CANCELLATION OF TECHNICAL EVALUATION ISSUES

## a. All evaluation findings are categorized in one of four types of issues:

(1) Critical Issue. An issue requiring action because it adversely affects an advertised service, has a substantive detrimental impact on the user; or clearly compromises safety. Each critical issue is given an action deadline which may typically vary from "immediate" to "one-month," to convey the urgency of the need. The evaluation team member(s) propose a timeline for accomplishment and negotiate its acceptance with SMO management.

(2) Significant Issue. An issue requiring resolution because it has the potential to become critical; affects an advertised service; has a negative impact on the user; could substantially improve service, etc. Each significant issue is given an action deadline which may typically vary from "one-month" to "2 years" to convey the immediacy of the need.

(3) Pending Issue. An issue identified during the course of an evaluation, which requires additional investigation. It must be placed in one of the other three categories of issues prior to final publication of the evaluation report.

(4) Information-Only Issue. All issues other than critical, significant, or pending issues. These issues are not assigned action but are include in the group evaluation report for information only.

b. Assignment of Critical and Significant issues may be made only to the SMO, the regional NASTEP office, or the national NAS Technical Evaluation Program office. The regional or national office may in turn negotiate the assignment and acceptance for the resolution of these issues to another regional or national OPI, but remains responsible for the eventual clearing or canceling of the issue.

c. Clearance or cancellation of a Critical or Significant Issue is accomplished by the OPI, who should coordinate with the originator of the issue to determine that the resolution is satisfactory or the cancellation is appropriate before changing the status of the issue. Cleared or canceled issues may be reopened should telcons, meetings, or other activities reveal the need.

16. PROGRAM REPORTS AND STANDARDIZATION TELCONS/MEETINGS. The NASTEP relies on several types of mandatory reports and standardization telcons/meetings to maintain a high quality information product while allowing maximum flexibility in program execution between regions:

a. Reports should be generated in standardized formats by nationally-developed and distributed program software.

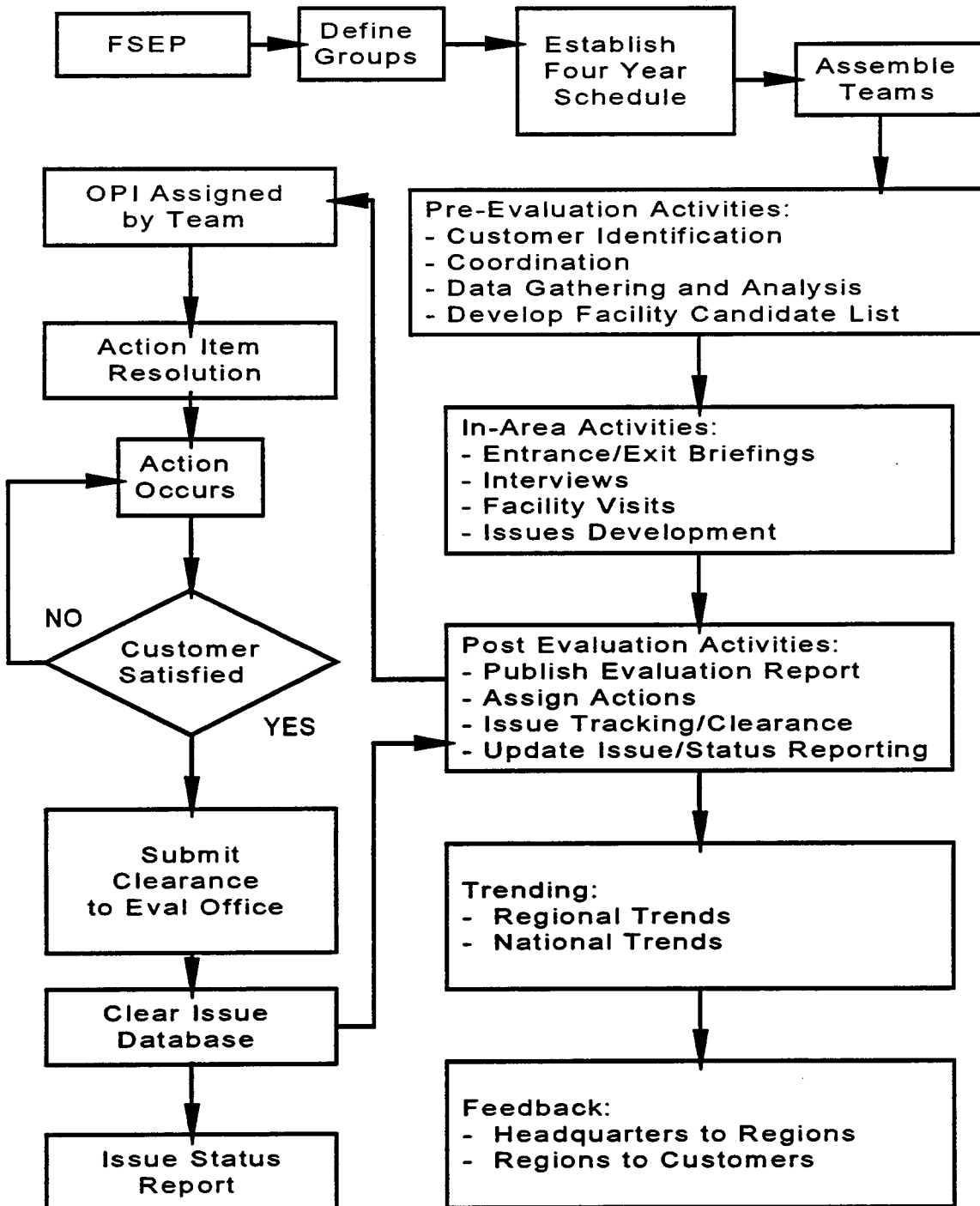
- a. A "Windows" interface with run-time licensing.
- b. Convenient issue entry for the evaluator, including an on-screen text editor and spell checker, and import/export capability with several popular word processors.
- c. Standard report generation with automatic pre-printed forms.

18. TECHNICAL EVALUATOR TRAINING. Because of the expanded scope of the NASTEP and increased contact with non-FAA users when compared to the previous technical inspection program, a standardized training curriculum for evaluators is required.

a. While discipline-specific knowledge (e.g., Navigation, Communications, Radar, Environmental, etc.) is assumed for all evaluators, subjects such as interviewing techniques, interpersonal behavior, dealing with the public, and pilot/controller use of the NAS facilities and services may represent new skills. A training outline is contained in the separate ALM-200 guidelines document and includes a required internally-developed course, which at least one member of each group evaluation team must have received. Optional courses are also identified.

b. If a region is unable to obtain the training quota needed to train a minimum of either 50 per cent of their evaluation personnel or at least one team member per group evaluation prior to the order implementation date, facility inspections as defined in paragraph 9b may be continued until such training is completed.

## APPENDIX 1. PROGRAM OVERVIEW FLOW DIAGRAM



## APPENDIX 2. JOINT TECHNICAL INSPECTION (JTI)

1. GENERAL. Inspections will be conducted by a joint inspection team consisting of representatives from the FAA and appropriate military agency. All key performance parameters including associated sub-items shall be checked. Key performance parameters are identified by arrows in FAA equipment handbooks, Chapter 3, Standards and Tolerances.
2. INSPECTION PROCEDURES. The JTI report will detail all out-of-tolerance conditions found during the inspection and specify the actual reading measured and the required standard to be met. A table showing the number of key and other parameters checked and the number of out of tolerance conditions for each facility will be included in the Executive Summary of the report. A copy of the final joint inspection report shall be provided to the military within 60 days following the completion of the inspection.
  - a. The Regional Program Manager shall provide quarterly status reports on open issues to the military organization that participated in the JTI. Such reports are due by the 15th of February, May, August and November.
  - b. For military-owned equipment, the JRPG approved checklists will be used. The JRPG approved Checklists will be attached to the Airway Facilities NASTEP Implementation Guidelines found at each JSS site.
3. JTI PROBLEM RESOLUTION. Problems found during a JTI shall be resolved as follows:
  - a. Problem resolution should be attempted through the combined effort of the senior military representative and FAA SSC manager. If their efforts are unsuccessful, the problems should be escalated.
  - b. The Airways Facilities SMO manager may enlist regional help if a problem is beyond their resources. If additional military help is required, assistance may be petitioned from the military agency that receives services from the facility. Coordination for requesting assistance will be through the regional JRPG coordinator. If necessary, the FAA JRPG Co-chair will coordinate with the appropriate military office and ensure the required action is taken.

APPENDIX 3. LISTING OF FORMS

The forms listed below are available through normal distribution channels. The unit of issue for each form is sheet.

<u>FORM NUMBER</u>	<u>TITLE</u>	<u>NSN</u>
FAA Form 6040-30	Executive Summary and Approval	0052-00-908-7000
FAA Form 6040-31	Inspection Data	0052-00-908-8000
FAA Form 6040-32	Action Item Record	0052-00-908-9000
FAA Form 6040-33	Facility Analysis Work Sheet	0052-00-909-0000
FAA Form 6040-34	Facility Analysis Work Sheet	0052-00-909-1000
FAA Form 6040-35	Facility Analysis Work Sheet	0052-00-909-2000
FAA Form 6040-36	Facility Analysis Work Sheet	0052-00-909-3000
FAA Form 6040-37	Facility Analysis Work Sheet	0052-00-909-4000
FAA Form 6040-38	Airway Facilities Technical Inspection Program	0052-00-909-5000
FAA Form 6040-39	Facility Analysis Work Sheet	0052-00-909-6000

**APPENDIX 4. INSTRUCTIONS FOR COMPLETING TECHNICAL INSPECTION FORMS**

1. **GENERAL.** The results of technical inspections shall be documented on FAA Forms 6040-30 through 6040-39 (see figures 1 through 10). It is optional to use FAA Form 6040-39 in lieu of FAA Forms 6040-33 through 6040-38. If FAA Form 6040-39 is used, one form shall be used for each facility inspected. A special inspection, as a minimum, shall be documented on FAA Forms 6040-30 and 6040-31. The numbered blocks referenced in the following instructions are keyed to the numbers in parentheses (n) on the sample forms. References to other orders apply to the current version of those orders. References to "sectors" apply to SMO's.

2. **FAA FORM 6040-30.** See Figure 1, Executive Summary and Approval.

- a. **Block 1, (Region).** Self-explanatory.
- b. **Block 2, (Sector).** Identify the AF sector responsible for the facilities covered in the inspection report.
- c. **Block 3, (Facilities).** Enter the facility type in accordance with the latest edition of Order 1380.40 Airways Facilities Sector Level Staffing Standard System, and the location identifier in accordance with the latest edition of Order 7350.6 Location Identifiers, for each facility included in the report. For example, all instrument landing system (ILS) facilities should be listed in accordance with the FSEP.
- d. **Block 4, (Inspection Type).** Periodic or special.
- e. **Block 5, (Inspection completion Date).** Insert the date the field work was completed at the facility. If several facilities are included in the report the date applies to the last inspected facility.
- f. **Block 6, (Executive Summary).** The executive summary provides agency management with an overview of the significant findings, both positive and negative, noted during the technical inspection, in narrative form. The executive summary should include commentary on the following:
  - (1) Facility reliability
  - (2) Equipment performance
  - (3) Technical documentation
  - (4) Certification
  - (5) Periodic maintenance
  - (6) Modifications
  - (7) Test equipment and calibration
  - (8) Meritorious activities

APPENDIX 4. INSPECTIONS FOR COMPLETING TECHNICAL INSPECTION FORMS

FIGURE 1. - FAA FORM 6040-30, EXECUTIVE SUMMARY AND APPROVAL

Airway Facilities Technical Inspection Program			Report No.	Page	of	Pages
EXECUTIVE SUMMARY AND APPROVAL			(12)	(13)		
Region (1)	Sector (2)	Facilities (3)				
Inspection Type (4)						
(5)						
EXECUTIVE SUMMARY						
(6)						
APPROVAL						
(7) ROUTING			INSPECTORS			
Symbol	Initial	Date	Type or Print Name	Signature	Date	
			(9)			
Regional Use (8)			Regional Use (10)			
			I have reviewed the findings of this report and direct that the assigned actions be accomplished.			
			(11)			
			Type or Print Name	Signature		
			Title	Date		

**APPENDIX 4. INSTRUCTIONS FOR COMPLETING TECHNICAL INSPECTION FORMS (CONTINUED)**

(2) Sector. Insert the total time expended by sector personnel in assisting the technical inspector during the field phase of the inspection; include all travel time, on site time, and exit briefing time.

(3) Clerical. Insert the total time expended by clerical personnel to type, assemble, and distribute the inspection report.

(4) Other. As determined by the region, this column may be used to compile additional data related to technical inspections.

j. Block 11, (Sector Employee(s) Assisting in the Inspections). Identify the name, title, and organization of the sector employee(s) who assisted in the inspection(s).

k. Block 12, (Exit Briefings). Identify the highest ranking sector official in attendance at the exit briefing and the date the briefing was conducted.



APPENDIX 4. INSTRUCTIONS FOR COMPLETING TECHNICAL INSPECTION FORMS CONTINUED)

4. FAA FORM 6040-32. See Figure 3, Action Item Record. This form is the action item listing page. The report may contain as many of these pages as needed.

a. Block 1, (Sector Location). Identify the AF sector responsible for the facilities being inspected.

b. Block 2, (Field Office Location and Cost Center Code). Identify the AFSFO having direct jurisdiction over the facilities being inspected. Where desired by the region, insert the cost center code of the AFSFO in the space allotted.

c. Block 3, (Inspecting Office). Identify the office, by routing symbol, responsible for conducting the inspection and completing the report.

d. Block 4, (Item Number). Enter the sequential number, beginning with "1", of the action items listed in the report.

e. Block 5, (Action Code). Enter the action item code, as listed in figure 4, which most closely represents the subject of the action item. The action items generally reflect the major topical headings on the work sheet, but in some cases are subdivided to enable more detailed information.

f. Block 6, (Action Item). Describe the actual discrepancy found. Cite specific references to applicable paragraphs in directives (e.g., key performance parameter tolerances). Include a narrative description when required to explain the problem. Provide additional documentation, identified in the discussion and attached to the report, to support an observed condition when necessary. Where appropriate, state the action required to correct the deficiency.

g. Block 7, (Action Assigned To). Identify the AF sector responsible for clearance of the action item.

h. Block 8, (Action Completed). Enter the month, day, and year that the final action was taken to correct the deficient condition; actions taken to order parts and modification kits, assign personnel, or assignment of associated responsibility "do not" constitute final clearance of the action item. If the deficiency was corrected during the inspection, insert "CDI" in the date column. With the exception of "CDI" action items, the individual who actually performed the corrective action to clear the item should initial in the appropriate column. The technical inspector may clear "CDI" items by initialing that the corrective action was taken. Supervisors or managers, in anticipation of clearance, should not initial the form. Action items assigned to the military should be closed out with written documentation to the appropriate FAA regional AF division JSS coordinator and a copy to the original case file.

**APPENDIX 4. INSTRUCTIONS FOR COMPLETING TECHNICAL INSPECTION FORMS (CONTINUED)**

5. **FAA FORM 6040-33.** See Figure 4, Facility Analysis Work Sheet. This form is the first of five facility analysis work sheets which allow the technical inspector to record the findings in the subject areas listed for up to eight facilities to be covered in a single report. Space is provided to record a numerical value, "Yes or No" or "Deficient (D)" or "Satisfactory (S.)" as applicable, in the appropriate column.

a. **Block 1, (Facility Type).** Enter the facility type in accordance with Order 1380.40 for the FSEP facility being inspected.

b. **Block 2, (Location Identifier).** Enter the location identifier in accordance with Order 7350.6.

c. **Block 3, Item 1. (Reliability).** Compare the facility performance and reliability to the national average over the most recent period for which data is available. Enter the number of unscheduled interruptions for the 12-month period indicated, the national average for unscheduled interruptions for this facility type, and the computed reliability average from the national air space performance analysis system for this facility. Indicate in the remarks section what action, if any, has been taken to improve the reliability.

d. **Block 4, Item 2. (Outage Reporting).** Compare the reportable facility outage information (scheduled and unscheduled) contained in FAA Form 6030-1, Facility Maintenance Log; FAA Form 6040-3, Facility and Service Outage Report (RIS: AF 6040-48); and FAA Form 6040-7, Line Performance Report (RIS: AF 6040-62), for compatibility in terms of quantity, cause code, times, dates, and duration. Enter the number of outages reviewed and the discrepancies and/or inconsistencies noted for the time period indicated.

e. **Block 5, Item 3. (Forms Analysis).** Analyze the facility technical performance records, FRDF, facility maintenance logs, AT Logs, frequency authorization, and equipment performance data sheets for compliance with governing directives, completeness, correlation, performance trends, needed corrective action, etc. Determine if the FRDF has been properly implemented. Review FAA Form 7230-4, Daily Record of Facility Operations, comparing dates, times, and adequacy of entries with applicable AF records (see block 4 above). Also assess any discrepancies involving frequency authorization documentation.

f. **Block 6, (Remarks).** Space is provided on each facility analysis work sheet (FAA Forms 6040-33 through 6040-37) for the technical inspector to provide comments, discussion, or notes related to the as-found condition of the facilities in the subject areas covered on that page. Utilize FAA Form 6040-38 for additional remarks concerning data recorded on the work sheets.

**APPENDIX 4. INSTRUCTIONS FOR COMPLETING TECHNICAL INSPECTION FORMS  
(CONTINUED)**

6. FAA FORM 6040-34. See Figure 5, Facility Analysis Work Sheet.

a. Block 1, (Facility Type). Enter the facility type in accordance with Order 1380.40 for the FSEP facility being inspected.

b. Block 2, (Location Identifier). Enter the location identifier in accordance with Order 7350.6.

c. Block 3, Item 4. (Uncleared Discrepancies). Determine if any uncleared action items remain dating back to the joint acceptance inspection prior to commissioning, previous flight inspections, and prior technical inspections. Specific information should be entered in the remarks and may be identified in the executive summary. Action should be assigned as appropriate.

d. Block 4, Item 5. (Certification). Assess the adequacy of the system/subsystem/equipment certification and certification practices and procedures in terms of compliance with governing directives, accuracy, and adherence to published schedules.

e. Block 5, Item 6. (Periodic Maintenance). Ascertain the adequacy and thoroughness of the periodic maintenance program and adherence to the requirements specified in the appropriate maintenance technical handbooks, manufacturers' instruction books, and Order 6000.15, General Maintenance Handbook for Airway Facilities. Determine the effectiveness of scheduling, controlling, and documenting periodic maintenance.

f. Block 6, Item 7. (Equipment Performance). Out-of-tolerance conditions should be summarized, differentiating between key performance parameters/key inspection elements (7.A.) and other performance parameters (7.B.). (Do not include items on roads, grounds, building structures, safety, etc. These items should be carried under their applicable blocks). Equipment adjustments or repairs required (not involving 7.A. or 7.B.) should be summarized under 7.C. The analysis work sheet should include figures to show the total number of key performance parameters/key inspection elements and other performance parameters checked and the total number found out of tolerance. Each required equipment adjustment and/or repair (7.C.) should be assigned as a corrective action item.

NOTE: Key performance parameters and inspection elements related to standby power systems are covered in block 9, Item 21. of FAA Form 6040-36.

g. Block 7, Item 8. (Modifications). Verify compliance with Order 6000.15 and Order 6032.1, Modification to Ground Facilities, Systems, and Equipment in the National Airspace System. Determine the extent to which the modifications listed in applicable electronic/plant equipment modification handbooks have been incorporated.

APPENDIX 4. INSTRUCTIONS FOR COMPLETING TECHNICAL INSPECTION FORMS (CONTINUED)

7. FAA FORM 6040-35. See Figure 6, Facility Analysis Work Sheet.

a. Block 1, (Facility Type). Enter the facility type in accordance with Order 1380.40 for the FSEP facility being inspected.

b. Block 2, (Location Identifier). Enter the location identifier in accordance with Order 7350.6.

c. Block 3, Item 9. (Configuration Control). Ascertain the status of CCD's and NCP's in accordance with Order 1800.E, National Airspace System Configuration Management. Determine if NCP's are needed, but have not yet been granted; approved, but no longer required; or approved, but the expiration date has passed. Determine if they are properly filed in accordance with applicable orders. Devote special attention if they involve flight inspection discrepancies, system and equipment tolerance limits, and test modifications. Use the remarks area to provide specifics.

d. Block 4, Item 10. (Test Equipment). Evaluate the condition of the test equipment, including calibration seals and stickers, and its adequacy for the purposes used. Reference Order 6200.4, Test Equipment Management Handbook.

e. Block 5, Item 11. (Working Equipment). Evaluate the condition and adequacy of the working equipment. Reference Order 4630.2, Standard Allowance of Supplies and Working Equipment for National Airspace System Facilities.

f. Block 6, Item 12. (Technical Documentation/Directives). Determine the availability, currency, completeness, and accessibility of applicable as-built site drawings, maintenance technical handbooks, system/equipment instruction books, and other written guidance.

g. Block 7, Item 13. (Aircraft Accident/Incident Procedures). Determine if Order 8020.11, Aircraft Accident and Incident - Notification, Investigation, and Reporting and related directives are current, accessible, and complete.

h. Block 8, Item 14. (Installation Deficiencies). Determine if any siting problems or equipment installation/design problems are known or suspected to exist which may impact the facility reliability, availability, and/or maintainability. Verify that such deficiencies have been adequately reported for corrective action. Reference any findings in the executive summary.

i. Block 9, Item 15. (Material Management). Investigate the effectiveness of the supply support, E&R, R&R activities, modification kit requisitions, equipment disposal, and other material management activities relative to the facility. This should be a cursory review of the Logistics and AF interface.

**APPENDIX 4. INSTRUCTIONS FOR COMPLETING TECHNICAL INSPECTION FORMS CONTINUED)****8. FAA FORM 6040-36.** See Figure 7, Facility Analysis Work Sheet.

a. Block 1, (Facility Type). Enter the facility type in accordance with Order 1380.40 for the FSEP facility being inspected.

b. Block 2, (Location Identifier). Enter the location identifier in accordance with Order 7350.6.

c. Block 3, Item 16. (Safety). Report potential and actual safety and health hazards and deficiencies in equipment, practices, and procedures that become apparent as an adjunct of the technical inspection. This observation is not intended to serve as the periodic inspection of work places as defined in Order 3900.19, Occupational Safety and Health. Report that safety inspections are being conducted as required. Report any problems associated with the handling of hazardous material. Determine if the required material safety data sheets are on site and available to the employees. Use Orders 1050.14, Polychlorinated Biphenyl's in the National Airspace System; 1050.15, Underground Storage Tanks at FAA Facilities; and 3910.5, Asbestos Control, for assistance in this area.

d. Block 4, Item 17. (Energy Conservation). Indicate what efforts are being made to promote energy conservation, and indicate if any established practices are wasteful of energy. Highlight new, better, or expanded procedures to improve energy utilization.

e. Block 5, Item 18. (Housekeeping). Observe the aesthetic aspects of the facility for the presentation of a clean, well ordered, professional appearance. with particular emphasis on storage and work areas.

f. Block 6, Item 19. (Buildings and Structures). Determine the physical condition of modular and built-in-place buildings, guyed and self-supporting towers, poles, and masts using the key inspection items in Order 6930.25, Maintenance of Structures and Buildings, as guidance. Examine the status and condition of the facility's lightning protection, grounding, bonding, and shielding (LPGBS). Use Order 6950.19, Practices and Procedures for Lightning Protection, Grounding, Bonding, and Shielding Implementation, Appendix 4, Lightning Protection System Inspection Checklist, to perform the examination. Determine if a viable buildings and structures periodic maintenance program is in effect.

g. Block 7, Item 20. (Primary Power). Determine the reliability of the commercial power service to the facility and the responsiveness of the local utility company to actual or potential problems. Correlate information with facility maintenance log and interruption data.

## APPENDIX 4. INSTRUCTIONS FOR COMPLETING TECHNICAL INSPECTION FORMS

FIGURE 7. - FAA FORM 6040-36, FACILITY ANALYSIS WORK SHEET

Airway Facilities Technical Inspection Program						Report No.		Page of Pages	
FACILITY ANALYSIS WORK SHEET									
FACILITY TYPE (1)									
LOCATION IDENT (2)									
16. SAFETY (3)									
A. Safety Inspection Current									
B. Fire Equipment Condition									
C. Hazardous Material, MSDS, Etc.									
D. Other Safety Deficiencies									
17. ENERGY CONSERVATION (4)									
18. HOUSEKEEPING (5)									
19. BUILDINGS AND STRUCTURES (6)									
A. Structural Condition									
B. LPGBS									
20. PRIMARY POWER (7)									
21. STANDBY POWER (8)									
A. Adequacy									
B. Number Key Parameters Out-Of-Tolerance Total Number Checked									
C. Number Other Parameters Out-Of-Tolerance Total Number Checked									
D. Number of Equipment Adjustments or Repairs Required (No. Out-Of-Tolerance)									
22. POWER CABLING AND DISTRIBUTION (9)									
A. Adequacy									
B. Grounding									
C. Surge Protection									
D. Other Deficiencies									
Remarks:									
Date	Location								

APPENDIX 4. INSTRUCTIONS FOR COMPLETING TECHNICAL INSPECTION FORMS (CONTINUED)

h. Block 8, Item 28. (Miscellaneous). This block may be used at the discretion of the regional AF division to annotate any discrepancy that is not covered under the previously described blocks.

**APPENDIX 4. INSTRUCTIONS FOR COMPLETING TECHNICAL INSPECTION FORMS (CONTINUED)**

10. **FAA FORM 6040-38.** See Figure 9, Inspection Program. FAA Form 6040-38 is intended to serve as a multipurpose continuation sheet for the executive summary, remarks, sketches, additional data, or whatever else is deemed appropriate to include in the technical inspection report. The report may contain as many of these pages as needed.

a. **Block 1.** Enter the title, as applicable, in all capital letters; e.g., EXECUTIVE SUMMARY (Continuation), REMARKS, etc.

b. **Block 2.** Use the space provided for the needed narrative descriptive, tabular, or information desired.



**APPENDIX 4. INSTRUCTIONS FOR COMPLETING TECHNICAL INSPECTION FORMS (CONTINUED)**

11. **FAA FORM 6040-39.** See Figure 10, Facility Analysis Work Sheet. This form is the facility analysis work sheet which will allow the technical inspector to record the findings in the subject areas listed. FAA Form 6040-39 can be used in lieu of FAA Forms 6040-33 through 6040-37. When using FAA form 6040-39, a separate work sheet should be used for each facility inspected. Space is provided to record a numerical value, "Yes or No" or "Deficient (D)" or "Satisfactory (S)," as applicable, in the appropriate column. Use FAA Form 6040-38 for remarks concerning data recorded on the work sheets.

a. **Block 1, (Facility Type).** Enter the facility type in accordance with Order 1380.40 for the FSEP facility being inspected.

b. **Block 2, (Ident).** Enter the location identifier in accordance with Order 7350.6.

c. **Block 3, (Location).** Enter the FSEP location of the facility.

d. **Block 4, (Inspection Date).** Enter the date that the field work was completed.

e. **Block 5, (Review Period).** Enter the beginning and ending month, day, and year of the review period of the documentation.

f. **Block 6, Item 1. (Reliability).** Compare the facility performance and reliability to the national average over the most recent period for which data is available. Enter the number of unscheduled interruptions for the 12-month period indicated, the national average for unscheduled interruptions for this facility type, and the computed reliability average from the NASPAS program for this facility. Indicate in the remarks section what action, if any, has been taken to improve the reliability.

g. **Block 7, Item 2. (Outage Reporting Accuracy).** Compare the reportable facility outage information (scheduled and unscheduled) contained in the FAA Forms 6030-1, 6040-3, and 6040-7 for compatibility in terms of quantity, cause code, times, dates, and duration. Enter the number of outages reviewed and the discrepancies and/or inconsistencies noted for the time period indicated.

h. **Block 8, Item 3. (Forms Analysis).** Analyze the facility technical performance records, the FRDF, facility Maintenance logs, daily record of facility operations, frequency authorization, and equipment performance data sheets for compliance with governing directives, completeness, correlation, performance trends, needed corrective action, etc. Determine if the FRDF has been properly implemented. Review FAA Form 7230-4, comparing dates, times, and adequacy of entries with applicable AF records (see block 4 above). Also assess any discrepancies involving frequency authorization documentation.

**APPENDIX 4. INSTRUCTIONS FOR COMPLETING TECHNICAL INSPECTION FORMS (CONTINUED)**

p. Block 16, Item 11. (Working Equipment). Evaluate the condition and adequacy of the working equipment. Reference Order 4630.2.

q. Block 17, Item 12. (Technical Documentation/Directives). Determine the availability, currency, completeness, and accessibility of applicable as-built site drawings, maintenance technical handbooks, system/equipment instruction books, and other written guidance.

r. Block 18, Item 13. (Aircraft Accident and Incident Procedures). Determine if Order 8020.11 and related directives are current, accessible, and complete.

s. Block 19, Item 14. (Installation Deficiencies). Determine if any siting problems or equipment installation/design problems are known or suspected to exist which may impact the facility reliability, availability, and/or maintainability. Verify that such deficiencies have been adequately reported for corrective action. Reference any findings in the executive summary.

t. Block 20, Item 15. (Material Management). Investigate the effectiveness of the supply support, E&R, R&R activities, modification kit requisitions, equipment disposal, and other material management activities relative to the facility. This should be a cursory review of the Logistics and AF interface.

u. Block 21, Item 16. (Safety). Report potential and actual safety and health hazards and deficiencies in equipment, practices, and procedures that become apparent as an adjunct of the technical inspection. This observation is not intended to serve as the periodic inspection of work places as defined in Order 3900.19. Report if safety inspections are being conducted as required. Report any problems associated with the handling of hazardous material. Determine if the required MSDS's are on site and available to the employees. Use Orders 1050.14, 1050.15, and 3910.5 for assistance in this area.

v. Block 22, Item 17. (Energy Conservation). Indicate what efforts are being made to promote energy conservation and indicate if any established practices are wasteful of energy. Highlight new, better, or expanded procedures to improve energy utilization.

x. Block 23, Item 18. (Housekeeping). Observe the aesthetic aspects of the facility for the presentation of a clean, well ordered, professional appearance, with particular emphasis on storage and work areas.

y. Block 24, Item 19. (Buildings and Structures). Determine the physical condition of modular and built-in-place buildings, guyed and self supporting towers, poles, and masts using the key inspection items in Order 6930.25 as guidance. Examine the status and condition of the facility's LPGBS. Use Order 6950.19, appendix 4, to perform the examination. Determine if a viable buildings and structures periodic maintenance program is in effect.

APPENDIX 4. INSTRUCTIONS FOR COMPLETING TECHNICAL INSPECTION FORMS (CONTINUED)

ff. Block 31, Item 26. (Water and Sanitation Systems). Determine the adequacy of installed water and sanitation systems, using Order 6920.2 as guidance. Determine if locally added systems conform with the national policy Order 6960.1. Determine if a viable periodic maintenance program is in effect.

gg. Block 32, Item 27. (Security). Report potential or actual physical security problems (i.e., signs of vandalism; inadequate or broken locks, fences, and gates; missing signs; etc.) which could compromise facility performance. This should be an integral part of the technical inspection and does not take the place of the regularly scheduled security inspection performed by personnel of the Air Transportation Security Organization in accordance with Order 1600.6. Report potential or actual data security problems in accordance with Orders 1600.54 and 6000.32.

hh. Block 33, Item 28. (Miscellaneous). This block may be used at the discretion of the regional AF division to annotate any discrepancy that is not covered under the previously described blocks.

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